

REMARKS

Claims 1-2 and 4-8 remain pending in the above-identified application, and stand ready for further action on the merits.

Claim Amendments

By this amendment, various editorial revisions are made in the claims. The claims otherwise substantially correspond to the previously-presented claims from a substantive standpoint.

Interview with Examiner

Applicants thank the Examiner for the courtesy extended toward their representative during the interview of June 18, 2007. During the interview, various claim amendments were discussed. The Examiner raised several questions regarding the proposed claim language from a formality standpoint. The above claim amendments accordingly reflect applicants' attempt to address the concerns of the Examiner raised during the interview, as well as those raised in the Office Action.

Objection to Specification

The Examiner raises several formal objections to the specification at pages 2-4 of the Action. Without going into a detailed analysis of each objection, applicants inform the Examiner that the Examiner's comments have been carefully considered. In response thereto, various editorial revisions have been made in the pending claims which are believed to satisfactorily address the comments of the Examiner in support of the various objections.

The noted objections are thus believed to be moot and should be withdrawn.

Objections to Claims

The Examiner raises several formal objections to the claims at page 4 of the Action. Without going into a detailed analysis of each objection, applicants inform the Examiner that the Examiner's comments have been carefully considered. In response thereto, various editorial revisions have been made in the pending claims which are believed to satisfactorily address the comments of the Examiner in support of the various objections.

The noted objections are thus believed to be moot and should be withdrawn.

Rejection under 35 USC 112 (paragraph two)

Claim 4 stands rejected under 35 USC 112 (paragraph two) as not distinctly claiming the invention. In response, claim 4 is amended in a manner which is believed to overcome the rejection. The rejection is accordingly believed moot and should be withdrawn.

Rejection under 35 USC 112 (paragraph one)

Claims 1-2 and 4-8 stand rejected under 35 USC 112 (paragraph one) as failing comply with the written description requirement. This rejection is respectfully traversed.

In response, the claims are amended in a manner which is believed to overcome the rejection. The rejection is thus believed to be moot and should be withdrawn.

Claim language interpretation

Applicants have carefully reviewed the Examiner's comments regarding the interpretation of the claims as set forth at pages 6-7 of the Action.

In response thereto, to the extent deemed appropriate by applicants, various editorial revisions have been made to the claims to clarify applicants' intent as to the scope of the claims. For instance, the claims are amended to clarify that the under-waist portion is positioned right below the waist opening portion with the areas extending outwardly to be one and the same. The claims also clarify that the waist elastic member is continuous with the entire waist portion. The claims now also require that the elastic member be located in the portion of the waist opening portion right above the under-waist portion.

Claim Rejections Under 35 USC 102(b) and 103(a)

The Examiner issues the following rejections over the cited prior art:

(1) Claims 1, 2 and 5-7 stand rejected under 35 USC 102(b) as being anticipated by ***Clear et al. US '584*** (US 5,368,584) and thereby ***Buell et al. US '274*** (US 5,221,274).

(2) Claims 4 and 8 stand rejected under 35 USC 102(b) as anticipated by or, in the alternative, under 35 USC 103(a) as obvious over ***Clear et al. US '584*** and thereby ***Buell et al. US '274*** and ***Lawson '278*** (US 4,695,278).

Reconsideration and withdraw of each of these rejections is respectfully requested based on the amendments made herein to the claims and the following remarks.

Claims 1-2 and 5-7 have been rejected under 35 USC 102(b) as being anticipated by *Clear et al. US '584* (US 5,368,584) and thereby *Buell et al. US '274* (US 5,221,274).

Reconsideration and withdraw of this rejection is respectfully requested based on the amendments made herein to the claims and the following remarks.

In the cited art references, a large sheet of the elastic member is arranged so that it extends from a waist portion to an under-waist portion, thereby covering two portions. This structure gives disadvantages, inasmuch as the contractibility of the references' waist portions and the under-waist portions are *manifested together and operate dependently*.

Accordingly, the cited references provide no teaching or other disclosure that provides for a diaper as instantly claimed wherein one can effectively differentiate the extension stress of a *waist opening portion* from that of an *under-waist portion*. Such references also fail to provide any motivation to those skilled in the art that would allow them to arrive at or otherwise produce a diaper as instantly claimed wherein one can effectively differentiate the extension stress of a waist opening portion from that of an under-waist portion.

More specifically, in *Buell US '274*, its elasticized waistband 35 is disposed in a portion not having fastening tapes. The present invention is distinguished from the prior art *Buell US '274* reference on this point. For example, in amended claim 1, it is positively recited "the under-waist portion having said fastening tapes directly attached thereto".

Furthermore, in the prior art of *Buell US '274*, since the provided elastic member is a sheet, when the elastic member is pulled in a width-wise direction of the diaper, the elastic member contracts/shrinks in a perpendicular direction to the pulling direction (i.e., it contracts in

a vertical direction). Thus, expansion and contraction of the provided elastic member in the width direction negatively affects expansion and contraction of the elastic member in the vertical direction.

On the other hand, in the present invention (*see claim 1*), it is positively recited that:

“...the waist opening portion being provided with a continuous waist elastic member in a width direction of the diaper at least along a central extent of said waist portion and extending continuously above at least a portion of said under-waist portion elastic members, and the under-waist portion being positioned right below the waist opening portion and said under-waist elastic members oriented in the width direction of the diaper, and which are separate from the continuous waist elastic member....” (emphasis added)

AND

“...wherein the continuous waist elastic member and the plurality of under-waist elastic members do not touch each other....”

Accordingly, in the instantly claimed invention, the continuous waist elastic member and the plurality of under-waist elastic members are able to separately expand and contract, and are not influenced by each other.

Further, it is submitted that the “elastic side panel members 90” which *Buell et al. US ‘274* and *Clear et al. US ‘584* provide for are different from the recited “under-waist” member in the inventive diapers under consideration. This is because the “elastic side panel members 90” extend over both any asserted waist opening portion and under-waist portion in the absorbent articles of *Buell et al. US ‘274* and *Clear et al. US ‘584*.

For example, as touched upon above, an elastic member when stretched in a longitudinal direction, also experiences a change in a perpendicular (transverse) direction. As such when an

elastic member is stretched in one direction (e.g., longitudinal), it is also shortened in another direction (e.g., transverse). To envision this, the Examiner need only consider what would happen when exerting an outward pulling force on a sheet or strip of adhesive material. While the material stretches longitudinally it will at the same time shorten in the traverse direction (e.g., in the middle sections thereof).

As such, when an absorbent member of the cited art of *Buell et al. US '274* or *Clear et al. US '584* is set with the pulling of fastening tapes, the “elastic side panel members 90” shorten in a transverse direction, thereby resulting in a loss of fitness to the wearer and a varying of a fixed position on the waist portion of the diaper, which is undesirable.

In contrast, because in the instantly claimed disposable diapers, the waist opening portion is provided with a continuous waist elastic member that is separate from the under-waist portion of the diaper and the plurality of under-waist elastic members, as well as the fastening tapes that are attached *directly* to the under-waist portion of the diaper, such problems do not occur or are much less likely to occur in the disposable diapers of the instant invention, than in the absorbent articles of *Clear et al. US '584* or *Buell et al. US '274*.

In the *Clear et al. US '584* and *Buell et al. US '274* patents, the presence of an elasticized waist feature is provided, which is on the opposite side of where the fastening tapes 92 exist (i.e., on the front side of a wearer), with the same being a main aspect of each of the inventions thereof.

For example, in the *Buell et al. US '274* patent, claim 1 thereof recites as follows (wherein item numbers and bold italics have been added for emphasis):

1. A disposable absorbent article having a lateral centerline, and a lateral direction parallel to the lateral centerline, the absorbent article comprising:
a containment assembly comprising an absorbent core having side edges and waist edges; and

an elastic waist feature at least extending longitudinally outwardly from one of said waist edges of said absorbent core, *said elastic waist feature comprising*

an elasticized waistband comprising

(i) *a shaping panel zone 136* being elastically extensible in at least the lateral direction,

(ii) *a waistline panel zone 138* resiliently flexurally joined with said shaping panel zone, said waistline panel zone being elastically extensible in at least the lateral direction, and

(iii) a predisposed, resilient, waistband flexural hinge zone joining said shaping panel zone and said waistline panel zone for allowing relative flexural bending between said shaping panel zone and said waistline panel zone when forces are applied and for providing a restoring force to resiliently return said shaping panel zone and said waistline panel zone to essentially their preceding in-use configuration when the forces are removed.

Likewise, at column 51, lines 41-45 of the *Buell et al. US '274* patent, it is disclosed that:

“Since in a preferred embodiment of the elastic waist feature, a segment of the backsheet has been removed to form the waistline panel zone, the extension forces of the waistline panel zone are less than the extension forces of the shaping panel zone.”

However, the above description pertains to the side of the absorbent member that does not have fastening tapes, and does not pertain to the side of the absorbent member that contains fastening tapes. This is of course, completely different from the embodiments of applicants’ claims 1 or 5.

Similarly, while the “waistline panel zone 138” or “shaping panel zone 136” of the cited *Clear et al. US '584* and *Buell et al. US '274* references does exist outwardly, they do not extent

from each longer side of the absorbent side member, but instead from the shorter side of the absorbent member (as is shown in Fig. 1 or 2B of the *Buell et al. US '274* reference). This is quite different from the instant invention being claimed.

Apart from the above considerations, each of the *Clear et al. US '584* and *Buell et al. US '274* references have elastic side panel and elastic waistband on the side thereof where fastening tapes exist. However, there is no citation of any comparison between their elasticity, even though the following can be ascertained, based on the description at column 45, lines 23-30 of the *Buell et al. US '274* reference; namely, that the extension forces of the side panels can be less than the extension forces of the waistband (*which is quite the opposite to the instant invention being claimed*):

“While the extension forces of the elasticized waistband 35 may be greater than the extension forces of the elasticized side panels 30, in a preferred embodiment of the present invention, the extension forces of the elasticized waistband 35 at its designed extensions is less than or equal to the extension forces of each elasticized side panel 30 at its designed extensions.” (see column 45, lines 23-30 of Buell et al. US '274; emphasis added)

Further, in the *Buell et al. US '274* reference, the side panel is attached to the other members in a substantially *untensioned* condition, whereas in the instant invention the plurality of body surrounding elastic members is attached with an extended form.

“In an especially preferred embodiment, the elastic side panel member 90 is operatively associated in the ear flap 88 by joining the elastic side panel member 90 to the topsheet 24, the backsheet 26, or both while the elastic side panel member 90 is in a substantially *untensioned* condition.” (see column 35, lines 57-62 of Buell et al. US '274; emphasis added)

Such a recitation in the cited art is of course contrary to claims 1 and 5 of the instant invention.

The above stated differences clearly evidence that neither the *Buell et al. US '274* nor the *Clear et al. US '584* patent is capable of anticipating applicants claimed invention. This is because neither of the references discloses or teaches each of the instantly claimed elements.

In order to apply the instant rejection against the pending claims under the provisions of 35 USC 102, the Examiner relies on the fact that the cited *Clear et al. '584* patent incorporates certain portions of the *Buell et al. '274* disclosure therein.

However, it is submitted that even upon incorporating the disclosure of *Buell et al. US '274* into the disclosure of *Clear et al. US '584*, one does not arrive at the instant invention as claimed. That is, one does not achieve an absorbent member having each of the limitations recited in the pending claims, and as a result the instant invention as claimed is not anticipated.

While *Clear et al. US '584*, may inherently discuss the possibility of a diaper having a waistband portion, that may be worn on either the front or back side of a wearer (*e.g., see column 16, lines 62-68*), the mere addition of the disclosure of *Buell et al. US '274* to that of *Clear et al. US '584*, does not result in one of the advantageous absorbent articles of the invention, or meet all of the limitations of any of pending claims.

In setting forth the original rejection, the Examiner appears to apply the following logic and/or reasoning.

- (i) *Clear et al. '584* incorporates the disclosure of *Buell et al. '274*;

- (ii) *Clear et al.* '584 inherently teaches the possibility of a waist region on the front or back of a wearer;
- (iii) *Buell et al.* '274 only teaches positioning its waistband 35 on the front of the wearer;
- (iv) *Buell et al.* '274 teaches the extension force of the waistband 35 is less than that of the side panel 30; and
- (v) Based on items (i) - (iv) above, *Clear et al.* '584, must inherently provide for the Buell et al. '274 waistband 35 and side panel 30 with the relation of force in the waistband being \leq to that in the side panel.

However, such logic and such reasoning on the Examiner's part does not result in the instant invention as claimed under the provisions of 35 USC 102 or 35 USC 103(a), based on the following considerations.

In the disclosure of *Buell et al.* '274, at column 45, lines 23-30 the following is taught regarding the relative extension force strengths of the waistband and side panel.

...While the extension forces of the elasticized waistband 35 may be greater than the extension forces of the elasticized side panels 30, in a preferred embodiment of the present invention, the extension forces of the elasticized waistband 35 at its designed extensions is less than or equal to the extension forces of each elasticized side panel 30 at its designed extensions.(emphasis added).

However, even based on this disclosure in *Buell et al.* '274, one of ordinary skill would not be able to understand which extension force (waistband or side panel) is greater in absorbent articles of either *Buell et al.* '274, or *Clear et al.* '584 (which incorporates the *Buell et al.* '274 disclosure). This is because of the following points:

- (1) In both the embodiments of *Buell et al.* '274 and *Clear et al.* '584, there occur side panels that run and overlap with the waist portion or an end of the waistband portion. As a result, it is difficult or impossible to know or determine, with any

precision what the extension force of the waistband portion is verses that of the side panels.

- (2) When comparing the extension force of the waistband of **Clear et al. '584** or **Buell et al. '274**, with the side panel, one would necessarily be comparing a combined extension force of the waistband and side panel portions with that of the side panels (due to side panel overlap with the waist portion or an end of the waistband portion).

Consequently, one skilled in the art, would find it irrational to conclude that the disclosure of **Clear et al. '584** (or **Buell et al. '274**) would ever meet the limitations of the instant claims.

Apart from the above considerations, in **Buell et al. '274** at column 45, lines 30-42, the following is disclosed regarding extension strengths.

... An elasticized waistband 35 having lower extension forces than that of the elasticized side panels 30 provides for easy stomach movement without displacing the diaper on the child. The higher extension force elasticized side panels allow for small dimensional changes over the hip and under the stomach to keep the product comfortably in tension on the wearer. This design provides better fit, less leakage and improved comfort for the wearer through the reduction of sagging, gapping, rollover and roll-in at the front of the diaper and overall sliding/slipping of the diaper or diaper absorbent core on the wearer during use. (Emphasis Added)

Briefly, as can be understood from the above disclosure in **Buell et al. '274**, the phrase “an elasticized waistband 35 having lower extension forces” is aimed at being used on the front side, and not on the backside having fastening tapes. On the other hand, the phrase “the higher extension force elasticized side panels 30”, which is thereafter described is intended to be used on the backside (*see Figure 1*). As such, the disclosure of **Buell et al. '274** intends that one utilize an elasticized waistband 35 and elasticized side panels 30 in a manner where the same are oppositely positioned to each other (*see Figure 1*).

The dimensional changes of the human waist are well known in the art, with the dimensional change of the human waist being bigger at the stomach side/front side waist portion than at the backside waist portion. As a result, it is preferable for the stomach side/front side waist portion of a diaper to elongate more easily than the backside waist portion thereof. From such a viewpoint, the above noted disclosure of *Buell et al.* '274 can be better understood.

Thus, even if the disclosure of *Buell et al.* '274 is technically incorporated into the disclosure of *Clear et al.* '584, one of ordinary skill in the art would not arrive at the instant invention as claimed, based on the fact that (i) *Buell et al.* '274 only teaches positioning its waistband 35 on the front of the wearer, and (ii) *Buell et al.* '274 is only concerned with placing fastening tapes on backside of its absorbent member. Accordingly, it follows that one utilizing the incorporated teachings of *Buell et al.* '274 in *Clear et al.* '584, would not envision or otherwise reach a disposable diaper as instantly claimed, wherein the fastening tapes are positioned in a distinctly different manner.

It is noted that nowhere in the cited disclosure of *Buell et al.* '274, is there provided any teaching or disclosure regarding any aim to control the relational forces in the waistband and the side panel for fitting or following to the body when its absorbent member is being worn by a wearer, and there is no aim to control the relational force where the fastening tapes are placed. This is, of course, counter to the purpose and function of the disposable diapers of the instant invention.

The above stated differences clearly evidence that neither the *Buell et al.* '274 nor the *Clear et al.* '584 patent is capable of anticipating applicants claimed invention. This is because neither reference discloses or teaches each of the instantly claimed elements and limitations.

Further, given the deficiencies of the cited *Buell et al.* '274 and *Clear et al.* '584 references, the additionally-cited *Lawson* '278 patent, as applied to claims 4 and 8, cannot result in a finding of obviousness of the subject matter of those claims.

In view of the above, both rejections under 35 USC 102 and 35 USC 103 should be found to now be without basis, and each should be withdrawn.

Based upon the amendments and remarks presented herein, the Examiner is respectfully requested to issue a Notice of Allowance clearly indicating that each of the pending claims are allowed and patentable under the provisions of Title 35 of the United States Code.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact John W. Bailey (Reg. No. 32,881) to expedite prosecution in connection with the present application towards allowance.

Payment in the amount of \$120.00 is submitted herewith as payment for the requested one month extension of time.

**37 CFR § 1.111 Reply to
Office Action of March 1, 2007**

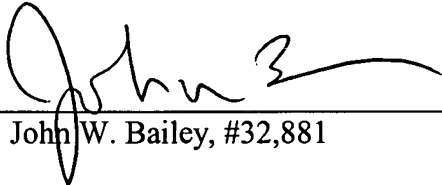
**Attorney Docket No. 0445-0315P
Serial No. 10/058,087**


If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Dated: July 2, 2007

Respectfully submitted,

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By 
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